

**PATENT APPLICATION**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of

Docket No: Q96905

Hitoshi AOKI, et al.

Appln. No.: 10/593,465

Group Art Unit: 1614

Confirmation No.: 2689

Examiner: Kevin E WEDDINGTON

Filed: September 19, 2006

For: INHIBITOR OF BLOOD GLUCOSE LEVEL ELEVATION AND INHIBITOR OF AGE  
GENERATION COMPRISING ACEROLA LEAF EXTRACT AND FOOD PRODUCT  
COMPRISING EITHER THEREOF

**RESPONSE UNDER 37 C.F.R. § 1.114(c)**

**MAIL STOP RCE**

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

In response to the Office Action dated December 3, 2010, please consider Applicants' remarks as follows on the accompanying pages. A Request for Continued Examination (RCE), a Declaration under 37 C.F.R. § 1.132, and an Information Disclosure Statement (IDS) are also being filed concurrently herewith.

**TABLE OF CONTENTS**

REMARKS.....2

**REMARKS**

Claims 9 and 11-19 are pending in the application. Claims 12-17 are withdrawn from consideration as being directed to a non-elected invention.

**Response to Claim Rejection Under the Doctrine of Nonstatutory Obviousness-Type Double Patenting**

Claims 9, 11, 18 and 19 were provisionally rejected on the ground of nonstatutory obviousness-type double patenting as allegedly being unpatentable over Claims 1, 2, 4, 5 and 7-12 of copending Application No. 12/182,772.

Application No. 12/182,772 was abandoned, with an effective abandonment date of July 30, 2009. A Notice of Abandonment was dated November 14, 2008.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the provisional nonstatutory obviousness-type double patenting rejection of Claims 9, 11, 18 and 19.

**Response to Claim Rejection Under 35 U.S.C. § 103(a)**

Claims 9, 11, 18 and 19 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Leitz et al. (U.S. Patent No. 4,877,627).

Applicants respectfully traverse the § 103(a) rejection of Claims 9, 11, 18 and 19, at least for the following reasons.

The Examiner's position is that "[s]ince the acerola leaf and fruit are derived from the same tree and the prior art teaches the acerola pulp which contains polyphenol can decrease glucose absorption; obviously, one skilled in the art would have assumed the acerola leaf would possess the same activity as its fruit and its pulp in the absence of evidence to the contrary." See paragraph bridging pages 4-5 of the Office Action.

Applicants respectfully disagree with the Examiner's position, as noted above.

It is well known in the art that different organs of a single plant contain different types of polyphenols, i.e., plant polyphenol patterns are organ specific. *See, e.g.,* Rilhinen, et al. (Food Chemistry, (1 September 2008), 110(1), pp. 156-60), Graham (Flavonoid and isoflavonoid distribution in developing soybean seedling tissues and in seed and root exsudates, Plant Physiol., (1991) 95, pp. 594-603), and Hayashi, et al. (Organ specific localization of flavonoids in *Glycyrrhiza glabra* L., Plant Science (1996), 116, pp. 233-38), copies of which are submitted herewith, along with an Information Disclosure Statement.

Additionally, since acerola leaf and acerola fruit are not the same color, and it is known that polyphenols may act as a pigment providing color or as a component causing a bitter taste, those skilled in the art would have expected that the polyphenols of the acerola leaf are different from those of the acerola fruit. Thus the Examiner's assumption that "one skilled in the art would have assumed the acerola leaf would possess the same activity as its fruit and its pulp in the absence of evidence to the contrary" is incorrect.

Moreover, Applicants have analyzed the polyphenols contained in acerola leaf extract and in acerola fruit extract. The experimental results discussed in the Rule 132 Declaration, being filed concurrently herewith, show that an acerola leaf extract and an acerola fruit extract contain different types of polyphenols – the polyphenol component derived from the acerola leaf is mainly composed of kaempferol, whereas the polyphenol component derived from the acerola fruit is mainly composed of cyanidin-3-rhamnoside (C3R) and the amount of kaempferol in acerola fruit polyphenols is very small.

Therefore, even if, *arguendo*, a person of ordinary skill in the art were to rely on the disclosures in Leitz, the person of ordinary skill would not arrive at the presently claimed invention with a reasonable expectation of success.

Accordingly, Applicants submit that Claim 9, and dependent claims thereof, are not obvious based on the teachings in Leitz, and request reconsideration and withdrawal of the § 103(a) rejection of Claims 9, 11, 18 and 19.

**Conclusion**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

SUGHRUE MION, PLLC  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

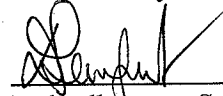
WASHINGTON OFFICE

**23373**

CUSTOMER NUMBER

Date: March 3, 2011

Respectfully submitted,



Debodhonyaa Sengupta, Ph.D.  
Limited Recognition No. L0578